Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

ORIGINAL

Title: American Centrifuge Plant Draft EIS
Public Meeting

Docket Number: (not applicable)

Location: Piketon, Ohio

Date: Thursday, September 29, 2005

Work Order No.: NRC-627 Pages 1-101

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

+ + + + +

PUBLIC MEETING TO DISCUSS

DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR AMERICAN CENTRIFUGE PLANT

+ + + + +

THURSDAY

SEPTEMBER 29, 2005

+ + + + +

PIKETON, OHIO

+ + + + +

The public meeting was held in the auditorium of the Verne Riffe Career and Technical Center, at 7:00 p.m., Chip Cameron, Facilitator, presiding.

PRESENT:

JIM CLIFFORD, NRC

SCOTT FLANDERS, NRC

BRIAN SMITH, NRC

YAWAR FARAZ, NRC

I-N-D-E-X

P-R-O-C-E-E-D-I-N-G-S

(6:59 p.m.)

FACILITATOR CAMERON: Good evening everyone. My name is Chip Cameron, I'm the Special Counsel for Public Liaison at the Nuclear Regulatory Commission, the NRC, and I'd like to welcome you to the NRC's public meeting tonight. The subject that we're going to discuss is the NRC's environmental review. As part of it's evaluation of a application we received from USEC to construct and operate a uranium enrichment facility known as the American Centrifuge Plant, and the NRC staff will be telling you about other parts of our evaluation as we make a decision on whether to grant this license, and I would just thank all of you for being here.

I'm going to serve as your Facilitator tonight, and generally my role will be to try to assist all of you in having a productive meeting.

I just want to cover three points on meeting process before we get into the substance of tonight's discussion and I'd like to tell you a little bit about the format for the meeting, tell you about some simple ground rules and go over the agenda and introduce our speaker for tonight.

In terms of format, it's going to be a two-part meeting. For the first part is for us to give

you information about the NRC's evaluation process, and also the findings in the draft environmental impact statement that we prepared, and then to go on to you to answer the questions that you might have about either the process or the environmental impact statement. The second part of the meeting is going to give us an opportunity to listen to you, to your comments, to your recommendations, to your concerns about the draft departmental impact statement.

I would emphasize the word "draft" to you, because it will not be finalized until we evaluate all the comments that we hear tonight, as well as written comments that we're going to be soliciting from you, and the staff will tell you more about that in a few minutes.

In terms of ground rules, when we go on to you after the NRC presentation for any questions that you might have, if you have a question, just signal me and I'll come out to you with this cordless microphone. Please introduce yourself to us and any affiliation, if that's appropriate, and ask your question and we'll try to answer it for you.

I would ask that only one person speak at a time for two reasons: one, most importantly, is so we can give her full attention to whomever has the floor at the moment and secondly, so that we can get a clean

transcript. Our stenographer tonight is Kris Kaun, over here, and that will be the public record of the meeting, and it will be available to anybody who wants to get a copy of the transcript.

I would -- during the question part of the meeting, I would ask you to just keep it to questions. There will be an opportunity for comment later. I know that often, when we're getting a question out there may be comment attached or wrapped around it. That's fine, but I would try to -- ask you to try to keep your comments to when we get to the comment part of then meeting, and try to be as brief as you can. It's hard to --- and in terms of these complex and sometimes emotional issues -- but try to be brief so that we can make sure that we give everyone an opportunity to participate tonight. In fact, when we go to the second part of the meeting and you come up to the podium to talk, I would ask you try to follow a five-minute guideline. That's not a hard and fast rule, but after about five minutes, I'm going to have to ask you to wrap up. If you have material that you'd like us to attach to the transcript, either graphics or if you have a prepared statement, we will be glad to attach that to the transcript and obviously, you can submit more detailed comments to amplify on what you say tonight during the written comment period. Usually five minutes is enough

time for people to summarize their most important points, and it accomplishes two important things: it alerts the NRC to issues that it should start looking at beginning tonight, talking to you after the meeting, perhaps, to get more information about those issues, and it also alerts those in the audience to concerns that you might have. So the public comment part of the meeting is extremely important.

In terms of our, agenda we have one speaker who is going to talk about the NRC process and then the findings in the draft environmental impact statement, and that's Mr. Matthew Blevins, who's right here. Matt is the project manager in the environmental review on this license application, and to give you little bit of his background, he's been with the NRC for approximately six years doing environmental reviews on various types of license applications, various types of projects that we get. He was a private consultant before he came to the NRC, working in low-level waste disposal and decommissioning and he is a master's degree in environmental engineering from Clemson University and a bachelor's in chemistry from West Virginia University -- or, is that the University of West Virginia? He's not sure. Well, hopefully, he knows more about chemistry then that, but Matt will talk to you -- and if you just told

your questions until he's done, it won't be that long, and then, we'll come out to you for questions and then we'll proceed with the rest of the program. We have to be out, I think -- wrap up by about 9:45 tonight so that the custodians can close the school down by 10:00 or so, but the NRC staff will be here after the meeting two talk to anybody, and you'll be getting some contact information from them. Please feel free to call them or send an e-mail if you have concern or questions and thank you all for being here. This is an important decision that the NRC has to make, and we thank you for helping us in making that decision.

Before we go to Matt and his presentation, we do have one of our senior managers here tonight, Mr. Jim Clifford, who is chief of the special projects branch at the NRC. He's been with the NRC for about 25 years and has been involved in a wide range of activities, and he's just going to give you a little bit of perspective on all this. Jim?

MR. CLIFFORD: Thank you. This is the only time that Chip will ever give up his microphone, because I -- after I give it back him, he maintains it for the rest of the night. And, Chip and I have done a number of these meetings together.

My name is Jim Clifford. You know my

title, but the responsibilities I have are for the technical review for this application and for overall project management for the successful completion of the review, whether that ends up allowing a license or deciding not to allow a license.

My counterpart for the environmental side of the activities is Scott Flanders who's sitting in the middle of the table and he has responsibility for the environmental side of the review as well.

Just to let you know who's available at the table to answer any questions that may come up and will be listening to comments as well, Brian Smith is my supervisor -- the supervisor who works for me who's responsible for all the gas centrifuge reviews including this one and then Yawar Faraz is the technical and overall project manager for our review.

So, I just wanted to end my welcome to everybody who has come out tonight and shown interest. We are here to listen to your comments and take your comments back. I will tell you, we've done similar meetings. We did one for the Louisiana Energy Services. We got over 4,400 comments by the end of the comment period, and we do go through and we do look at them, and we do address everyone of them. So make sure you speak out, we're here to listen to your comments tonight. Thank you.

FACILITATOR CAMERON: Okay, thank you very much Jim, and let's go to Matt for his presentation. This is Matt Blevins. Matt?

MR. BLEVINS: Okay, thanks Jim. Hello everyone, my name is Matt Blevins -- is this on? Can you hear me? Okay.

As Chip mentioned, we're here tonight to discuss the proposed American Centrifuge Plant and on behalf of myself and the other staff we want to welcome you to the meeting. Now just one clarification, I did graduate from West Virginia University, but I heard they changed their name, so that's the point of uncertainty.

PARTICIPANT: The microphone is not working.

MR. BLEVINS: I may need to stand closer. Is that better? I'll stand closer. Can you hear me now?

PARTICIPANT: I can hear you verbally from where you're standing but I don't know about anybody else back there.

MR. BLEVINS: Anybody in the back, can you hear the speakers, do you think?

PARTICIPANT: Yes.

FACILITATOR CAMERON: Okay, good. Thank you, sir.

MR. BLEVINS: Okay, thank you. As Chip

told you, our main goal tonight here is to listen to your comments. First, I'm going to briefly describe the NRC's license and review process, and then go into the findings, at least in a summary fashion, of the environmental review. When I've completed the short presentation, we're going to have a short question and answer session and then we're going to -- for the bulk of the time, we're going to sit here and listen to your comments.

Now, the important thing is, I want to point out that tonight is not the only time that you can submit comments, and I'll describe in more detail at the end of the presentation how you can submit other comments.

This was last-minute addition. The NRC is an independent regulatory agency. We report directly to Congress. We are not part of the Department of Energy, they are a separate agency and the report to the President. Now, the NRC has oversight responsibilities for wide variety of facilities, the most obvious of which are commercial power reactors, but we also regulate things such as medical uses, such as the radiation used to treat cancer.

The NRC's mission is to protect public health and safety as well as worker health and safety, along with the environment. The NRC does not promote nuclear projects. All nuclear projects must meet strict

safety and environmental requirements before the NRC will issue a license. Commercial nuclear facilities must have a license from the NRC before they can hold or use nuclear materials. In addition, the NRC conducts frequent and periodic inspections of our licensees. If we find out that the licensees are not following the requirements of the license, we can take enforcement action. The NRC would provide regulatory and inspection oversight for the proposed USEC facility.

Currently, we are reviewing USEC's license application to determine whether we can issue to license. There are three main portions of NRC's licensing review: We have the safety and security review, we have the environmental review, and then we have a formal hearing process.

Yawar's in charge of the safety and security review, and he's currently prepared -- he's currently preparing what is called a safety evaluation report. I'm in charge of the environmental review and the draft environmental impact statement, which we're discussing here this evening. Those two documents form part of the basis for whether or not we issue the license.

Additionally, as I mentioned there's a formal hearing process made up of a panel of Judges. They will ultimately make a recommendation to the NRC's

commissioners about whether to issue a license. Then, those NRC commissioners will then publicly vote on whether or not to issue the license, and that vote is based on all the information in those different reviews I just discussed.

Now, the next slide, I'm going to switch gears and we're going to talk just briefly about what USEC is proposing just make sure that everyone understands just we're talking about. USEC is proposing to build a uranium enrichment facility. It would be known as the American Centrifuge Plant, and in this plant, USEC intends to enrich uranium using a gas centrifuge process. Now, a gas centrifuge, shown here in the diagram, it's a machine used to enrich uranium. Basically, the machine uses high-speed rotors that's able to spin the different isotopes into different fractions. In other words the heavier uranium-238 isotopes are able to be separated from the lighter uranium-235 isotopes. The gas centrifuge process will be used to enrich natural uranium from its natural concentration of about .7 percent to somewhere between 3 and ten percent, and that's dependent on what USEC's customers need.

The proposed facility would be located within the existing Department of Energy reservation. USEC does propose to make use of some of the existing

buildings. For example, two large process buildings which are already present would be used to house the centrifuges. Other facilities would have to be built such as a tails withdrawal facility.

Now, I'm going to switch gears again and we're going to move onto the environmental review and what some of the results that were. First, I want to show you the various resource areas that we looked at in preparation of the draft EIS. We looked to see whether there would be impacts to each of these resource areas including such important concerns as public health and transportation. As you can see, it's a pretty extensive list. In terms of how we evaluated the impacts, first we looked at all phases of the project, both construction, operation, and decommissioning for each of those resource areas that we talked about on the previous slide. Now, once our experts determine what the impacts were, we went back and then we categorized those impacts as being either small, moderate, or large. And we'll -- on the very next slide, I'll define what those slides are, or what those terms are.

Now, the draft EIS also discusses mitigation measures. Mitigation measures are things that USEC can do to help decrease a potential negative environmental impact. For example, USEC has stated that

they will use dust suppression techniques for excavation under dry conditions, and this relates to an air-quality impact. All the impacts on all these resource areas are discussed in the draft environmental impact statement in chapter four, and that's the thick document that's back there on that back table if you didn't get a copy already.

Now as I just said, once the experts determine the impacts, we then categories them into small, moderate, or large. The definition of those categories are shown here. Small impacts are those that are either not detectable or they're so minor that they would neither destabilize nor noticeably alter any important attribute of a resource. Moderate impacts would be noticeable, but they wouldn't destabilize any important attribute of resource. The large impacts would clearly be noticeable, and they could eventually -- or, they could destabilize a resource. We did not find any large impacts for the proposed USEC facility.

Before we move on to the discussion of those areas that had moderate impacts, I want to briefly show you the areas that we estimated to receive small impacts. In particular, I want to focus on two areas that have received a lot of attention, starting with cultural resources. I wanted to provide a little more detail so you all know what we considered during the review.

In analyzing the impacts to cultural resources, we followed the procedures as required under the National Historic Preservation Act for consultation and more specifically, we used the criteria for determining eligibility to the National Register of Historic Places.

In this analysis we define what is called an area of potential effect. This includes the immediate area of construction, and this is what we call for the direct effects, and this could -- a direct effect could include a piece of heavy equipment uncovering a cultural resource. Now, we also extended this area of potential effects out of the DOE or the Department of Energy preservation boundary. And, this was for what we call indirect effects such as noise or visual intrusion. Now, in addition to those cultural resources which were inside the area of potential effects, we also looked to cultural resources which were immediately near the DOE reservation, and that was based on scoping comments we received when we were here last January, and based on information has been presented in the ongoing legal hearing. Based on this review, we determined that the impacts to cultural resources would be small.

I also want to briefly discuss water resources. Our analysis found that the impacts on water

supply would be small because the withdrawals would only -- are only expected to increase by 10 percent over the existing usage. Moreover, the total withdrawal is estimated to be only 31 percent of the currently permitted levels. So, in other words, the supply wells were originally designed and permitted to pump more water than is currently anticipated for the USEC proposal.

Our analysis also found that the impacts to water quality will be small. This is based on the fact that the USEC will not routinely discharge process water. To explain in a little more detail, the Centrifuges are cooled a closed loop cooling system. The important part of that is that none of the water that comes into contact with the centrifuges is discharge into the environment. That primary cooling water system gets rid of its heat to a secondary cooling water system and it does that through heat exchangers. The important part of that is that the two waters don't come in physical contact, so there's no mixing. Additionally, any leakage or spills would be collected in a separate system. If this collected water meets NRC regulations then it can be discharged to the site's sanitary sewer treatment system. If it doesn't meet the NRC regulations, it would have to be containerized and shipped offsite.

During our analysis, we found that five

resources areas may experience small to moderate impacts. They may experience moderate impacts during some portion of the facility's lifetime -- that's probably a better way to say it -- but, not necessarily for the entire facility lifetime. For example, the impacts during the construction phase might be moderate but then once they to go to the operations phase, those impacts may become small. The five areas that have moderate impacts are air-quality, socioeconomics, transportation, public and occupational health, and waste management, And I'm going to discuss each of these areas in detail in the next set of slides.

For air-quality, we analyze various pollutants. The moderate impact was found to exist for particulate matter. More technically, the particulate matter is known as PM2.5. The PM2.5, it refers to the average size of the particulate matter. In this case, it's 2.5 microns in average on the diameter. In other words, it's very small particulate matter. The level of PM2.5 would slightly exceed the existing air-quality regulations for a distance of about 3,000 feet beyond the site boundary. This is primarily related to the exhaust from the construction equipment. It should also be noted that this area of Ohio has high background of PM2.5. The numeric details can be found in the draft EIS, but a good

way to summarize it is that the proposed USEC facility would increase those levels by about 16 percent. Again, this is related just to the construction phase from about 2007 to about 2011.

Now, we also looked at emissions during the facility -- during the operation of the facility, including the emissions of hydrogen fluoride, or HF, and -- as well as emissions of uranium. The release of HF and uranium would be very small -- very -- I guess you'd say very far below the background -- I'm sorry, below the regulatory thresholds. The actual numbers, for example, the hydrogen fluoride is about .003 micrograms per cubic meter, and to put that in perspective, the regulatory threshold is 2500, so you can see that there's a large difference between those two numbers. And that's similar for the uranium numbers as well. The numeric details, again, are found in chapter four of the draft EIS.

Socioeconomics includes a wide range of areas. We analyze employment, population, housing, public services, and financing -- finances. We found that the employment impacts would be moderate because the proposed facility would either create or sustain jobs in the local area. We also found that impacts to the population increases would be small and that's primarily because of the small number of people expected to move to the area,

and I have some of the job numbers here listed on the screen.

For transportation, we looked at both materials and equipment coming to the site as well as workers commuting back and forth. Now, during both the construction in the operations phases combined, we estimated -- the estimate was less than five combined fatalities from either the shipment of the materials and equipment or from workers daily commutes, and this is just from normal routine daily traffic accidents, not including -- you know, in other words, if another vehicle were to run of the road, in other words a non-radiological accident.

Then, we looked at the radiological impacts from the transportation or the routine shipment of these radioactive materials, and when we say "routine shipment" we mean, if there weren't any accidents, and then, we also looked at what would happen if there were different accident scenarios involved with that transportation. Again combining those two estimates over the 30-year period, we expect less than one additional cancer death over that time frame. We consider the impacts of these areas to be small.

Now this analysis assumed that all the materials would be shipped by truck except for the

depleted uranium tails, which is a type of radioactive waste, which we'll talk about on the next slide. For that analysis, we assume that the depleted uranium tails would be shipped by rail. For that shipment scenario, we would expect far less than one additional cancer death over the shipping time frame. And again, we expect this to be a small impact.

Now, during construction, we expect minor congestion primarily on US Route 23. Route 32 will see increase traffic but it won't be as noticeable as on 23. Because the speed of these routes will be slightly reduced and because of the increased number of vehicles, we've concluded this would be a moderate impact.

Now, in addition to the small radiological impacts which we just talked about, it's also possible that an accident could have nonradiological impacts. For example, the formation of a hydrogen fluoride gas could be created. The exact impacts vary based on several factors, for example, whether it happens in a rural location or whether it happens in a city. It also depends on the meteorological conditions. It depends on which way the winds are blowing and whether it's a stable atmosphere. And, it also depends on what the material is, whether it's UF6, which is the uranium hexafluoride, or whether it's U-308. The results are summarized in detail in chapter --

in table 416, and there were a lot of numbers so I think you have to go look at that to get a feel for what the ranges are. Now, because of the low probability of such a severe accident occurring, we found that the nonradiological impacts from accidents would be moderate.

Now, as you know, USEC would be handling radioactive materials. So, we do a careful assessment of any possible health effects that may occur. We look at both workers at the facility as well as the public living near the facility. We found that for construction, normal operations, and decommissioning, the radiological health impacts to both workers and the public would be small. During operations, it was estimated that the nearest member of the public would receive between .2 and 1 millirem per year and this is dependant upon the location around the facility. The south and southwest direction receives its highest exposure from the airborne emission, and that relates to about the .2 millirem per year number. The direct radiation contributes the highest dose to a theoretical member of the public at the north boundary, and we say and we say theoretical because nobody currently lives there. But, that number -- that -- the highest dose in that area was about 1 millirem per year. Both of these doses are well below the NRC's regulatory requirements of 25 millirem per year.

We also looked at accidents and we found high or intermediate consequences for several accidents that were analyzed. Now, however, there are safety equipment that's at the facility that makes such as severe accident highly unlikely. Based again on the low probability that such a severe accident would occur, we determined those impacts would be moderate as well.

The last area I'm going to discuss is waste management. The facility would generate both non-radiological waste and radiological waste. The non-radiological waste could include things such as scrap metal from construction and the radiological waste could include things such as dirty rags or laundry, but most of the radioactive waste is depleted uranium tails. The uranium tails could be stored on site until their eventual conversion and disposal.

Now, we found that the impacts from the non-radiological waste and most of the radiological waste to be small. That is, there's adequate capacity at an appropriate licensed disposal facilities. The impact -- now specifically to the depleted uranium tails, the impacts from the storage of the depleted uranium tails was also estimated to be small to moderate. It was estimated to have small impacts on the nation's disposal capacity, small impacts from transportation of the depleted uranium

once it's converted into a more stable form, and small health impacts once it's eventually disposed of. The moderate impact is the necessary extension of DOE's depleted uranium conversion facility that's also going to be located on the DOE reservation.

That conversion facility, the one that's currently under construction, would have to operate for a much longer period of time than if it were just converting the existing inventory. DOE has considered this operating extension in their previous environmental reviews.

Now that concludes my technical overview of the draft EIS findings, and now, I'm going to switch gears and tell you how to submit comments.

First off, we're going to be accepting oral and written comments this evening. You may not have anything to say this evening, and that's okay, but you may hear something or something may come to you afterwards, and that's why the comment period ends October 24. It's important that you understand that we consider all the comments when we're preparing the final EIS. All those comments are going to be included in an appendix to that final EIS. Along with that -- along with your comments, there's going to be a NRC response, and that way you understand how we addressed your comments.

The important thing is when you're

something comments outside of the meeting, I want you to note the docket number on your comments. That way, it gets routed to the right people, it doesn't get lost in some of the different paper mailboxes that we have at the NRC. You can send your comments via regular post office mail or you can send them to the e-mail address listed. Also, we have some blank comment forms back here on one of the tables. Feel free to write your comments out on those blank forms as well, if you'd like, and you can provide those on your way out the door this evening.

Now in the next two slides, we're going to talk about some of the different web addresses where you can get more technical information. On the first web address, it's where you can see an electronic version of the draft environmental impact statement, and I think this is important because it has better resolution of the pictures. The second web site address takes you to the NRC's web site and it talks -- it has general information about the USEC licensing proceeding and generally has some of the more important documents. Now, this web site address may be the most important because it takes you directly to the NRC's electronic reading room, and on that web site, you can get all the publicly available documents about the USEC licensing action. Examples of documents that you can find this web site include records of phone

conversations, e-mails, meeting summaries and other public comments, and of course, all of USEC's submittals. Now, if you're having trouble finding a document in his electronic reading room, I've given you public document room, they have staff that said there and their job is to help you find it and provide you electronic copies, so just e-mail them or give them a call and they should be able to help you find something.

Now in terms of the NRC staff, if you have an overall licensing question or a safety and security review question, probably the best person to contact is Yawar, and I've given his contact information here. If you have any questions on the environmental review, you can contact myself, and we have -- again, these are on copies of the slides if you got one of those when you came in.

So that wraps up my presentation, and -- do you want me to sit down, or --FACILITATOR CAMERON: Why don't you just stay up there because I think we'll have some questions now. The NRC points of contact, can we leave that up there because I didn't see a slide.

MR. BLEVINS: It should be in the last page there on the back.

FACILITATOR CAMERON: All right.

MR. BLEVINS: Maybe you have a bad copy.

FACILITATOR CAMERON: Okay, but we'll --

MR. BLEVINS: We can --

FACILITATOR CAMERON: -- leave this up so that you can have time to look at it, and Matt, you can -- people can submit comments by e-mail, --

MR. BLEVINS: Yes.

FACILITATOR CAMERON: -- also, right?

MR. BLEVINS: Yes.

FACILITATOR CAMERON: Okay.

MR. BLEVINS: On the previous slide, there was an e-mail address.

FACILITATOR CAMERON: And, note that there is an e-mail address on their for --

MR. BLEVINS: Or, you can e-mail it to me and I'll forward it to the e-mail address.

FACILITATOR CAMERON: Okay, great. Now, are there questions? Yes, sir, please introduce yourself to us.

MR. KITE: Fred Kite from WEB News, in Athens. If, in fact, you have your EIS issued -- the final EIS issued by April 2006, when would the final, final approval of the NRC come?

MR. BLEVINS: I'm going to defer -- I think it's in early '07, but Yawar probably has the best time frame for that.

FACILITATOR CAMERON: And, it would be the final decision. It may not necessarily be an approval.

MR. BLEVINS: Right.

FACILITATOR CAMERON: But, it would be the final decision. Yawar?

MR. FARAZ: The NRC Commissioner has issued an order and in the order, they have set a goal for the entire review. It was a 30 month, review from the submittal of the application to the final decision. Based on the 30 month schedule, it's February of '07.

FACILITATOR CAMERON: Thank you very much, Yawar. And, let's go right out here. Yes?

MS. BAKER: I had two questions if you don't mind. My name is Deborah Baker. I have two questions, if that's alright. I wonder if you could compare your -- you're talking about the millirems that were the very small doses that were going to affect the locals around here. How does that compare to the doses that are estimated -- the real doses -- of people around nuclear power plants?

MR. BLEVINS: I'm going to give that to -- Scott, you want that one?

MR. FLANDERS: The doses that Matt spoke of, I believe, he said it was approximately about 1 millirem at the -- to a theoretical person at the

boundary, and around nuclear power plants, the doses vary based on the affluence, but they're typically very low, similar in nature to around nuclear power plants.

There's -- the regulatory limit for this type of facility is about 25 millirem, which represents a relatively small fraction of what the general public would receive from just day-to-day normal activities. It's about 300 millirem per year that's received to all of us just based on -- from natural sources, and there's about 60 millirem and that's assumed from activities, man-made type activities such as x-rays, flying in airplanes, et cetera, so the doses represent a very small fraction of the regulatory limit and an even smaller fraction of what a general member of the public would receive on a yearly basis.

FACILITATOR CAMERON: Okay, Deborah, your other --

MS. BAKER: Yeah, I just wanted to comment on that, that, as you know, cancer rates have gone up since nuclear testing has been going on in the atmosphere. So, the radioactivity in the air does affect cancer rates, and there is more radioactivity around nuclear plants and in fact, the cancer rates around nuclear plants -- power plants are higher than the cancer rates away from the nuclear power plants. If the rates are similar, then I

expect to see the same thing here, and of course some of the workers here have been contact -- contracting cancer. So, whatever the background rates are it sounds like that the industry is bad for people's health.

MR. FLANDERS: Well, just to add a few points, the background rates, I spoke of, the 360 millirem are not specific to exposure around a nuclear power plant. That's a general average of exposure.

PARTICIPANT: Can you speak into the mic?

MR. FLANDERS: Can you hear me? The background rates I was speaking of are general background rates, not necessarily background rates associated with nuclear power plants, or 360 millirem. That's just a general member of the public based on information collected by various radiological groups such as NCRP and international groups as well.

FACILITATOR CAMERON: And, Deborah, do you have another question?

MS. BAKER: I was wondering, who is the panel of Judges who will be making the recommendation?

MR. FLANDERS: There's a panel, there's a -- what's called an atomic safety and licensing board. It's made up of three Judges, and I'm not necessarily sure who the specific names of the Judges are, but these are what you would call -- I'm lost in my words, Chip. You

know better than I do -- Administrative Law Judges. It's made up of the three panel members. Usually one is a person with a technical background. Others are individuals with a legal background as well. So that's what makes up the panel.

FACILITATOR CAMERON: And if you need the exact names, we can get those to you off-line, Deborah.

And, Deborah made one statement and I believe that was that the radioactive emissions around nuclear power plants are higher than in areas away from cancer rates. I -- and I just would ask the NRC staff to think about whether there has been than any studies that demonstrate that or provide other information. We don't need to do it now but I just want to make sure that we get all the information on the record.

Thank you, Deborah. Thank you, Scott. Other questions? Let's go to Vina. We apologize for the feedback. Vina?

MS. COLLEY: Yes, I'd like to ask the NRC, would you be willing to sign a legal paper stating that this facility will cause no harm to the workers or the community, and if it did, who can they sue?

FACILITATOR CAMERON: And, this is Scott Flanders again.

MR. FLANDERS: The NRC has a set of

regulatory standards, which Matt spoke of briefly, that we do as a part of our safety evaluation report and those regulations are based on analysis by the NRC that we put those regulations in place, that we believe that if those regulations are satisfied, they're protective of public health and safety. So, in order for us to issue a license, we have to first ensure that the facility will be built in accordance with those regulations and then later operated in accordance with those regulations, and if they're not operated within accordance with those regulations, we would take enforcement action.

So, through that process is the NRC's way of ensuring and having reasonable assurance that they'll be protective of public health and safety. So, that's our regulatory process.

Our regulatory process does not include the signing of any specific documents, but our regulatory process includes this review and it's later reviewed by our Commission as well.

FACILITATOR CAMERON: Okay, thank you very much Scott, we didn't answer the --

MR. FLANDERS: Did I miss a --

FACILITATOR CAMERON: -- question, it's -- the way Vina phrased it is, if there's damage, who could be sued. In other words, liability for any --

MR. FLANDERS: Well, if --

FACILITATOR CAMERON: -- type of damage. I don't know if we can have the knowledge to address that right now, if you want to say anything about it in general, then --

MR. FLANDERS: I would say, generally, that if it was found that there was an accident or a violation of NRC's regulations, an enforcement action would be taken and the licensee would be held accountable for any violations of the regulations.

FACILITATOR CAMERON: And, in terms of any sorts of harm to people it would be handled in the typical way that any damage, I think, would be handled from any type of industrial facility, through a tort action in the courts. Vina, do you have a -- excuse me. Vina, do you have a follow up?

MS. COLLEY: Yeah, I'm just wondering if sovereign immunity is going to play into this liability to compensate these workers of the community, because right now, we have a compensation bill that's not working that's been in place for six years and not the first worker who had toxic chemical exposure -- if they didn't have cancer they can get paid, and they're still not even getting paid if they got cancer. So, I'm still wanting to know who is going to be liable if you guys give this company another

license to kill more people. I want to know who's going to be liable.

FACILITATOR CAMERON: If any of the NRC staff, or others, if we can try to piece together the framework of an answer that we can give to Vina after the meeting, let's try to do that. We do have some people here from our Office of General Counsel, so we'll talk to them about it. Yes, ma'am?

MS. SWAIN: Yes, this is a follow up on the comment that you made about violations -- NRC violations. I understand that USEC does have quite a few, in fact, a disgraceful record. They have, like, 16 violations of NRC regulations, and has that been taken into account? Has that been factored into this impact statement? And I have another question after that.

FACILITATOR CAMERON: Scott, or Yawar?

MR. FLANDERS: I'll start and I'll look for Yawar to see if he can answer. I assume you're speaking of violations as it relates to the operation of the gaseous diffusion facility?

MS. SWAIN: Right.

MR. FLANDERS: That -- the license for the gaseous diffusion facility is a separate activity. This is a review for a proposed license that they are proposing and we're evaluating right now the technical basis of how

they would construct and operate the facility. So we're about -- were doing a technical evaluation at this point in time. The aspect of looking at violations are done as a part of our inspection activities, which this plant will also have inspection activities.

FACILITATOR CAMERON: And, but, I don't think that in terms of whether violations are addressed in the environmental impact statement itself, as opposed to other parts of the licensing process, --

MR. FLANDERS: The operational -- the way in which they will operate the facility and the way in which we will be -- we will inspect the facility is addressed separate from the environmental impact statement.

FACILITATOR CAMERON: Okay, so you won't find any thing on that in the environmental impact statement, and as Matt and Jim Clifford talked about, there's other aspects to this review and this decision. Yawar, do you want to add anything on this? Yawar Faraz.

MR. FARAZ: As Scott mentioned, it's a certificate that we issued for the gaseous diffusion plant where the violations have occurred. We are reviewing the application for its merits -- this, for the centrifuge facility, and it would -- that's what we would base our review on, on the merits of the application. We look at

not, you know other -- if you find the application acceptable, we would conduct preoperation inspections to make sure that they construct the facility as described in the application, and then we will continue our oversight by conducting routine inspections and also unannounced inspections once they begin operations. So, that's how we would make sure that the facility is maintained -- safety is maintained.

FACILITATOR CAMERON: Okay, and if you want to -- yeah, I know you have another question. I think that for any licensee of the NRC, the enforcement record, the violations are all part of the public record and you can judge how, you know, serious you think they are and see what the fine wants. And, your --

MS. SWAIN: The second question is, has the NRC ever not licensed an applicant, other than LES, which was denied in a couple of places, but is still under application?

FACILITATOR CAMERON: And, I'll translate that into any type of facility, okay? Not just a facility like this.

MS. SWAIN: Not just a centrifuge.

FACILITATOR CAMERON: Scott?MR. FLANDERS: Throughout the NRC's regulatory history, I mean, there's been times where an application has come in and the NRC

has not approved that application. We approve the application only after it's been demonstrated that they can satisfy our regulatory requirements. So if it's demonstrated that the regulatory requirements can be satisfied after we've done our technical and environmental review, then we would issue a license, but until that point in time, so there's been cases where we did not find that the application demonstrated and satisfied all the safety requirements, and in some cases there's a need, also, to condition the license as well, which what -- is another way of adding additional requirements -- or, additional conditions to ensure that they satisfy our regulatory requirements.

FACILITATOR CAMERON: And, Scott, along those lines, there have been some cases, have there not, where we have requested that a licensed applicant do something to improve safety or to meet the regulations and they might have withdrawn their application?

All right, yes, let's go -- we'll go right here and then go to you, and please introduce yourself, sir.

MR. WEINER: Alan Wiener. I have two questions too, it's going around. One question is the nuclear fuel cycle in the back has, like, a one-way direction and there's no circle in it, and I wonder if

USEC or NRC determines the safety of the spent fuel. And the second question also -- I'll wait on the second one.

FACILITATOR CAMERON: Do you understand Allen's question in terms of what the NRC role is in regulating either the storage or disposal of spent nuclear fuel? Is that basically it?

MR. WEINER: And, the ultimate disposal.

FACILITATOR CAMERON: Ultimate disposal, okay. Scott?

MR. FLANDERS: The NRC has rules specific to the spent fuel, both storage and ultimate disposal. We have specific regulations in place that are in requirements for storage of spent nuclear fuel, as well as requirements in place that provide guidelines for ultimate disposal of spent nuclear fuel, as well.

FACILITATOR CAMERON: And, that last part, Scott, is referring to the fact that the Department of Energy has to get a license from the NRC. They have to meet all of our regulations to be able to construct and operate a repository for the disposal of waste at Yucca Mountain. Second question, Alan?

MR. WEINER: I wondered why there's an absence of any mention of higher percentages of concentration, meaning for other uses like bomb making.

MR. FLANDERS: The NRC does not regulate

the Defense uses of nuclear materials. That's separate from our responsibility.

MR. WEINER: Is that out of the question for this plant?

MR. FLANDERS: Under the NRC -- under the license that the NRC would grant, yes, the -- it would be limited in to -- as to how much they can enrich the fuel, so they -- or the material, I should say.

FACILITATOR CAMERON: Okay, does anybody from the NRC want to add anything on that last -- Yawar? Can you go up to the podium, please? Thank you.

MR. FARAZ: Just as Scott mentioned USEC would be authorized up to 10 percent for enrichment, and we have a separate plan that would require USEC to submit that plan to us. It's called the Fundamental Nuclear Material Control Plan, and that's a way to -- for USEC to demonstrate to us that they would not go above the 10 percent, and then the NRC would be -- would review that plant, obviously, and would be part of the application review and then the NRC would again, you know, conduct inspections to make sure that they are abiding by this FNMC Plan to make sure that there's no unauthorized enrichments, or any kind of divergent off of material.

In addition to the NRC, we expect the IEA, which is the international -- the UN body to -- if it

selects the American Centrifuge Plant for -- to conduct inspections for the IE to come in -- and also on its own, independently make sure that there are no unauthorized enrichments being conducted at this facility or material is not be diverted.

FACILITATOR CAMERON: Okay thank you. Let's go right here, excuse me, Dr. Manuta.

MS. PUCKSTEIN: I'm Jean Puckstein and my question is about the scoping process which some of us make contributions to. The document, as it appears as -- on the internet, the ADAMS Reading Room, did a summary of the scoping remarks, and it included after the summary remarks, pages or copies -- or some of the letters that have been sent in about the scoping process and in my computer and others I've talked with, we were not able to unscramble who those letters were from. In my experience reading other environmental impact statements and scoping reports, you usually include those letters in their entirety instead of a summary. Will that be done after this process?

MR. FLANDERS: For the scoping summary report, the NRC normally summarizes the comments, and that's so we can quickly and efficiently get the comments and the issues that out of the public so to make sure we understood what you said at the meeting. We don't --

there shouldn't have been any letters attached that scoping summary report that we issued in April, 2005.

Now for this -- for the draft EIS, when we go to finalize it, what we'll do is an add an appendix, and then, what you're talking about is everyone of the public comment letters will be in the appendix, and then we'll sort of cross-reference that the where the -- because that's a large document, we'll cross-reference that to where the NRC response will be nearby or will be cross-referenced so you can find it easily.

FACILITATOR CAMERON: If Jean wanted to see the actual letters that were submitted during scoping, those are part of the public record, and she can get to those, right?

MR. FLANDERS: Certainly. One of the things you can do is -- probably the most efficient way is if you contact the public document room at the number I listed, the 1-800 number, if you tell them what you're looking for, they're pretty efficient, and they'll be able to locate those numbers and they can tell you how to get those electronically. They're pretty small documents, the letters themselves, because they're probably one to two pages. We might have had some that were a little larger, but those would all show up on the record in a certain time frame.

FACILITATOR CAMERON: And if Jean is having trouble with this, she can contact you and see if you can give her some assistance from --

MR. FLANDERS: Yeah, I can too. The most efficient, though, is --

FACILITATOR CAMERON: Is to go --

MR. FLANDERS: -- public document. They're the professional people that do that.

FACILITATOR CAMERON: Okay. All right, did you have a follow-up?

MS. PUCKSTEIN: I wanted to ask Mr. Blevins, if I send a copy -- it's only one page of this scrambly language, would you be able to explain it to me?

MR. FLANDERS: I might. The only thing that we put on ADAMS are portable document files, PDFs. It's in an Acrobat reader file. It sounds like maybe a different file format was opened on a different program, maybe, in your computer, because I've seen some sort-of scrambled documents too. It's important just to use the right application.

MS. PUCKSTEIN: Okay.

FACILITATOR CAMERON: Well, you can give it a try.

MR. FLANDERS: Yeah, you can give it a try --

FACILITATOR CAMERON: Send it to him.

MR. FLANDERS: I'll try to find out what document it really is and then send you back the original version of that.

FACILITATOR CAMERON: All right, Dr. Manuta, you have a question?

DR. MANUTA: Well, it's actually to clarify what Mrs. Lever (phonetic spelling) just asked a few minutes ago. The gaseous diffusion process actually did at one time make what you defined as bomb-grade material, which is up to 97 percent. That process stopped in 1964 and the building was subsequently shut down in the early 1990s, around 1992. But, keep in mind that that's the gaseous diffusion plan, so that's an entirely different animal.

Now related in with the centrifuge is the fact that the licensing process here has a lot more knowledge base going into it because the NRC is involved, so there's kind of a talk the talk and walk the talk attitude -- walk the walk -- when the gaseous diffusion plant came about in the 1950s, the NRC didn't exist. Okay, very very important.

And so a lot -- and then getting back to what Vina was mentioning, I've dealt with a lot of this over the years. There are long periods of time where

people were not given all the information about the work that they were getting involved in. That era has come and gone, fortunately, and that's really critical to understand that as we move into the new era with the centrifuge, when the document is prepared with the assistance of USEC personnel to meet the criteria that NRC has and then for the judges to then pass their judgment at some point on the road, what you're going to find is that the legal mechanisms are in place so that if things happen which are unplanned and the object is that you've accounted for 99 plus percent of what the average employee is likely to encounter, there should be many fewer problems with the centrifuge than there were with the gaseous diffusion.

FACILITATOR CAMERON: Thanks, Dr. Manuta. Other questions out here? Anybody before we -- okay. Yes, ma'am?

MS. RAINEY: Carol Rainey. What happened with the centrifuge plant back in the seventies and was there environmental impact on what happened then? That's one of my questions.

MR. FLANDERS: I can briefly answer. The NRC wasn't involved in that original -- what was originally called the GSEC facility, that was a DOE project. My understanding is it was run for a very brief

period of time and currently, my understanding is some of the centrifuges did have radioactive material in them, but some did not. They're currently dismantling or refurbishing some of those centrifuges from the facility.

MS. RAINEY: Why didn't it work?

MR. FLANDERS: That I don't know. Yawar, do you have -- I think it might have been more of a budget issue but I'll let Yawar --

FACILITATOR CAMERON: And after that, can we -- let's move on and if there is more information, if anybody has it -- let's provide it off-line. Yawar?

MR. FARAZ: Well, from what I understand it was a political decision. The plant was operated successfully for short period of time, but then there was this AVLIS method that was on the horizon and the decision was made that, you know, AVLIS would be pursued as opposed to a gas centrifuge.

FACILITATOR CAMERON: Okay, and if -- whatever we can provide to her on that after the meeting, I think we'd best do it.

MR. FLANDERS: Question from up here that was new.

FACILITATOR CAMERON: Okay, and let's -- we'll take this question and then let's go to all of you to hear from you with comment. Yes, ma'am?

MS. WAHLEY: Lois Wahley. I have two sort of general questions which come from the background, which is provided in the report.

First is about how much this fuel, which is going to provide -- how much will that supply -- that is to say, will it supply five power plants, 10, 100? There seems to be only this one facility for this gaseous diffusion. There must be other methods which are being used, or something.

MR. FLANDERS: There are several methods and I think I can talk more generally, and to get into very detailed, we will have to go to Yawar or Brian, but the whole fuel -- the -- think of the 100 nuclear power reactors we have, the current demand is about 11 million SWU, which is called a separate work unit. This proposed facility would initially -- the initial license application is for 3.5 million SWU, or separate work units. There's also some capacity, or SWU capacity from the Russian down blending of high enriched uranium and I'm pretty sure you can find some of that information of USEC internet web site.

And then, there's also this proposal -- well, and before we get to that, there's the Paducah gaseous diffusion plant, which -- is that about 5 million SWU right now?

MR. FARAZ: It varies.

MR. FLANDERS: Okay, so it varies, but I think that's the number, I think, we used in the draft EIS, and then there's the proposed facility in New Mexico, which its licensed application was for 3 million SWU. So you can see, total, they're getting close to the number for the 11 million SWU needed for the fuel cycle. Right now, a lot of the SWU comes from overseas and one of the purpose it needs was the -- that Congress thought we perhaps needed a more secure domestic supply of this energy, this SWU capacity.

MS. WAHLEY: So, this would be about a third. Is that --

MR. FLANDERS: Roughly, yes.

MS. WAHLEY: The other question has to do with the -- what is it, megatons to megawatts, and the use of Russian nuclear warheads as background or source material for fuel source for the gaseous diffusion, is that correct? And a, you know, how many warheads are going to use up? I certainly hope -- and is there also, what about the US warheads? I guess that this plant would not be using dismantled US warheads, is that correct?

MR. FLANDERS: The American Centrifuge Plant isn't involved in the megatons to megawatts. When I said earlier --

MS. WAHLEY: Okay.

MR. FLANDERS: -- the Russian, the high enriched uranium, you are correct, the proper term is the megatons to megawatts. That agreement, my understanding, expires in 2013. So that's one of the reasons they feel we need to bring additional capacity online, they being the Department of Energy, for the more -- to get more of the domestic sources. The -- but the Russian material of the megatons to megawatts wouldn't, or isn't involved in the American Centrifuge Plant. The American Centrifuge Plant only uses natural-feed uranium, or natural assay uranium. Does that help?

FACILITATOR CAMERON: Okay, and is there any project that is involved in the mega to mega?

MR. FLANDERS: Yawar can answer that, I think that --

FACILITATOR CAMERON: I say, it isn't involved here, but for complete information, maybe we can give you that. Yawar?

MR. FARAZ: The material that's coming from Russia is essentially what the clients, the USEC's clients are requesting, so it comes down, downblended to whatever the customer needs.

So it's not a feed to the gaseous diffusion process nor is it going to be a feed to the gas

centrifuge process. It essentially taking -- it's brought in from Russia then provided to the plants directly.

FACILITATOR CAMERON: All right, thank you very much. Thank you all. Okay, one quick question, Geoffrey, before we go to comment?

MR. SEA: Yes, Geoffrey Sea. The draft EIS says in the beginning that one of the main justifications for the facility is that it if ACP goes into operation, Paducah will be shut down. What you just said was that Paducah would be needed to stay in operation to meet the total domestic demand for enriched uranium, so which is it? If this facility is not going to result in the shut down of the Paducah plant, then everything you say in here about how the cleaner technology and more efficient technology will be acquired by shutting down Paducah is irrelevant.

MR. FLANDERS: Right, if I gave the impression that USEC or the Paducah facility would have to stay online, that's not necessarily the case, but again, that's a USEC business decision. Even if they do license this, they're not required to shut down Paducah, so it's an issue of what the demand is for the SWU and how they produce that, how to decide on the business model to produce that SWU. What they have told us as they plan on shutting it down because the centrifuge process is more

efficient. Does that --

FACILITATOR CAMERON: Okay, thanks for asking that clarification, Geoffrey, and thank you, Matt and Scott, and we're going to go to the portion of the meeting where we hear from all of you, and our first commentor is MarJean Kennedy from the Governor's regional office. MarJean?

MS. KENNEDY: Thank you. We are confident in the NRC's evaluation that potentially there could only be very minimal impact to the public and occupational safety and health, especially given USEC's history of safe operation. Since USEC has operated the gaseous diffusion plant, it has -- excuse me -- it has a proven safety record. The plant is consistently below the national average in the number of OSHA-recordable illnesses and injuries.

Just like the gaseous diffusion plant, the centrifuge's commercial plant will also be a highly regulated facility, requiring strong safety programs in order to maintain strict compliance with all state and federal regulations for the safety and health of the employees, as well as the public.

As part of its review, the draft environmental impact statement, the NRC evaluated both the direct and indirect economic impacts from the plant, and

as stated earlier by Mr. Blevins, they determined that there be small to moderate impacts. Most are positive impacts, such as jobs and tax revenues. This conclusion seems reasonable, based on our understanding of USEC's project.

Site preparation and construction is estimated to cost 1.4 billion between 2006 and 2010. USEC tells us they're going to spend approximately 1.7 billion on the plant from 2002 until its completion. That's a lot of money for the local economies here in Piketon, Chillicothe, and all of southern Ohio. It means up to 500 jobs, both direct for the reservation and indirect for contractors in the region.

In addition to the multiplier effect, that money -- of that money on the local economy, these workers will be supporting our local businesses and that's good for everyone.

The cost estimates to construct and operate the plant were based on a facility that would generate 3.5 million SWU per year, as you just heard, but the draft environmental impact statement and USEC's environmental report anticipated growing the plant's output to 7 million SWU per year and that means more machines, more jobs, and more money into your local economy. The draft EIS does not anticipate any additional

problems from increasing the plant's output to 7 million SWU.

During the site preparation, refurbishment, and construction, it is anticipated that there will be 3,362 new full-time jobs created in the local economy. There is also an anticipated increase of $2.3 million in annual state income tax revenues and an increase of $3.7 million in annual state tax receipts. During American Centrifuge operation, 1,500 jobs are anticipated to be created as a ripple effect into the community. The state will potentially benefit from $1.8 million to $2.4 million in additional annual income in sales tax receipts, respectively.

At the end of the life of the centrifuge project -- centrifuge plant, excuse me, there will then be decommissioning phase. When the plant is closed, that time frame could be much longer as the experience from the gaseous diffusion plant shows. The gaseous diffusion plant began operation in 1956 and wasn't shut down until 2001 and it still has not been decommissioned, but when it is, there will be jobs for that work as well. The NRC estimates that $435 million will be spent over six years to decommission the American Centrifuge plant.

In closing, we appreciate the fact that the NRC has been taking a very hard, but a very fair look

at this project for the State of Ohio. Thank you.

FACILITATOR CAMERON: Okay, thank you Margie, and you're going to hear a lot of -- all of you are going to hear things tonight from other people that you may not agree with, you may really disagree with, and I would just ask all of you to just extend the courtesy to one another and respect for their opinions as we go along tonight.

Second speaker, Judy Newman from Congressman Ted Strickland. Judy Newman?

MS. NEWMAN: Thank you very much. I'm very pleased to be here to represent Congressman Strickland tonight, and I have a brief statement from him.

Congressman Strickland is very enthusiastic about the deployment of advanced enrichment technology in southern Ohio. He recognizes the importance of this program to the local area and to it's economy. Ted would also like me to express his appreciation for the dedicated workforce and their commitment to protect the health and safety of their colleagues and the community surrounding this facility, and Ted strongly urges USEC to employ these his local workers and capitalize on their expertise. Thank you so much.

FACILITATOR CAMERON: Okay, thank you, Judy, and thank the Congressman, too, for those remarks.

Lorry Swain?

MS. SWAIN: I'd like to give my five minutes to anyone else.

FACILITATOR CAMERON: Well, we don't -- if you want to take the time to comment, please come up and do it, but we usually don't give five minutes to anybody else, so maybe you want to come up and just tell us what's on your mind, all right? Thank you.

MS. SWAIN: Aside from the two concerns that I raised earlier, one about USEC's safety record and their violations at the gaseous diffusion plant, I also have a concern many of us carry, and that's that we do not buy into the idea that there is any safe place on earth in which to permanently and safely store the radioactive waste that would be generated by this plant. Thank you.

FACILITATOR CAMERON: Okay, thank you Lorry, and for your questions and comments from before. Deborah, do you want to come up and talk to us? I think we heard some of your concerns before. You want to talk from there? All right. This is Deborah Baker.

MS. BAKER: One of the comments that a proponent of this plant made was that the USEC plant that is there now has had an OSHA safety record better than the national average, but I would like to point out also that there was a whistleblower there who was fired, so there

are things that are going on that aren't being talked about.

Also, I did get the draft environmental impact statement. I didn't read it all. It's very large, and there was not a lot of time to look at it for those of us don't get paid 40 hours a week to do this kind of work -- to read, so I didn't read all of that so excuse that, but there are things that concern me.

For example, centrifuge technology -- the things that concern me are not the details like how many -- whether it's one millirem or 17 millirem, you now, 5 feet away or 5 miles away, but the facts like Lorry was talking about.

One is that the Centrifuge technology as we all know is -- as you were telling me, it's easier to make weapons-grade material from the centrifuge technology than from the gaseous diffusion. I'm not promoting gaseous diffusion, I'm just saying this is dangerous -- I think this is dangerous. I mean, this is a dangerous way to go.

The United States has not been honoring the Nuclear Proliferation Treaty, it's not decommissioning its weapons. In fact, there was a question about this and that question was not answered. And, in addition, the Bush administration wants to develop more nuclear weapons,

and they also said that they would be willing to make a first nuclear strike. I think this is very disturbing and I think this has a lot to do with centrifuge technology, and I don't think it's something that we should have.

I don't think any nuclear technology is something we should use, but this particular one is very dangerous for all the peoples of the world, not just people here in Piketon. That's one of my worries about this plant.

Another is that the fiscal responsibility. Ohio, as well as this county here, have paid a lot of money for this plant to locate here. Ohio has paid, like, $100 million, an awful lot of money, for 1,500 jobs? That's not a very good return. I understand that the local county also has given a complete tax abatement, that USEC is not paying local taxes. And so, this is not something that's good for the community, and according to the tax base.

In other ways, the tax payer subsidizes the nuclear industry. For example, the Price Anderson Act, Vina was asking, what -- who do you sue? The nuclear industry is not taking fiscal responsibility for accidents that will happen. They have very limited responsibility and I think even the newer acts, newer Patriot Acts have made the responsibility even less. The taxpayers are

responsible. We are the taxpayers and I, for one, don't want to subsidize the nuclear industry. Accidents will happen, accidents have happened, and I don't think we should be paying for it.

Other concerns are having contractors and subcontractors in smaller and smaller companies responsible for this work. Who do you sue? They're going to go out of business by the time you get your cancer. Where is your health benefits going to be paid by? Who's been to be paying your health benefits? Who's going to be responsible for -- that's just going to disappear by the way this is being done, you know, I mean, do we talk to DOE, to talk to USEC, do we talk to -- I mean, it's too confusing for response -- as far as responsibility is going.

And of course, as was mentioned before, also, there is no way too store radioactive waste until the time that it's no longer a danger. There is no way. It doesn't matter how thick this book is there is no way to do that. It's not safe. Yucca Mountain has not been approved. The people in Nevada do not want that waste going there. We wouldn't want that waste going here. If we can't send it out from here, it will probably say stay here. We don't want it here, it's dangerous.

I don't think I can say more than that.

FACILITATOR CAMERON: Okay, thank you Deborah. Jean -- and, is it Puckstein? All right. Jean Puckstein.

MS. PUCKSTEIN: Yes, I'm Jean Puckstein, and I'm speaking as a member of the public today.

For the past 20-some years I have been reading and critiquing environmental impact statements for licenses that would continue to endanger the public by the spread of radioactive materials. I offer my congratulations to your staff -- I'll say something good about it -- for writing the best looking DEIS I have ever seen, also the longest, at of some 450 pages.

Mr. Blevins is already repeated some of this, but I think it's so important, I'm going to go ahead and repeat it from my written statement. Quoting from the NRC's DEIS, This proposed action is the issuance of an NRC license for USEC under the provisions of the Atomic Energy Act. This license would authorize USEC to possess and use special nuclear material, source material, and byproduct material at the proposed American Centrifuge Plant in accordance with the NRC regulations, and the scope of activities to be -- this is a continuation of the quote -- the scope of activities to be conducted under the license would include the construction, operation and decommissioning of the plant.

The glossary included at the end of your DEIS defines special nuclear material, plutonium, uranium-233, or uranium enriched in the isotopes, ores containing .05% uranium or thorium, regulated under the Atomic Energy Act. In general, this includes all materials containing radioactive isotopes concentrations greater than the natural and the byproduct trailings from the formation of this concentrated material, and byproduct materials is defined as the tailings or waste products produced by the extraction or concentration of uranium or thorium from any ore processed primarily its source material content. See also source material, which I just read.

These very broad definitions seem to include any and all radioactive materials that USEC will be authorized to possess and use if NRC grants this license. Now, we've heard some discussion about the weapons-grade materials, and the -- I think it would be helpful in your final impact statement to include a list of the nuclear material that will not be used at the site.

Okay, then, quoting again from the DEIS under the heading, Staff preliminary recommendations regarding the proposed action, After weighing the impacts of the proposed action and comparing alternatives, the NRC staff, in accordance with the law blank sets forth its

recommendations regarding the proposed action. The NRC staff recommends that unless safety issues mandate otherwise, the proposed license to be issued to USEC in this regard, the NRC staff has concluded that environmental impacts are generally small, although they could be as high as moderate in the areas of air-quality, socioeconomics, and transportation.

Small is defined in the introduction as the environmental effects are not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource. Moderate is defined as the environmental effects are sufficiently -- sufficient to noticeably alter, but not the stable ways important attribute of the resource. And, large is defined as the environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

As Mr. Blevins has pointed out, that the NRC staff did not find any environmental effects that were considered large, very few, small the moderate, and almost all of their analysis and conclusions in this 450 page report would have small effects. Some of the examples of effects judged to be small, and because of our time constraint tonight, I'm only going to review one page, and that's page XXII in the summary introduction, and I'm

quoting, I'm giving three examples of how difficult it is to understand in these broad categories the real impacts when they're called small, medium, and large. Okay, the quote is, Construction of the new large cylinder storage yard, again, in addition to the other plant facilities that they license, would enable USEC to build in existing locations on the site, there's a proposed new cylinder storage yard, would result in small -- but the environmental impact statement goes on to state it would result in small impacts of flora and fauna in or around the tributaries of little Beaver Creek.

On the same page, the noise impact is rated small for a catastrophic failure of a centrifuge could cause a sudden but brief loud noise due to the high rotational speed of the centrifuge. However, the likelihood of a single centrifuge catastrophically failing is very low.

No mention is made of several centrifuges failing or the large screams of employees who are the victims of such an accident on the same page under the heading, Transportation, subheading, Small radiological impacts from routine transportation and transportation accidents, again, this is the same page. You know, I'm -- this is my last analysis, but it's to give you an idea of some of the doubletalk language used in this environmental

impact statement. The transportation of materials containing radio nuclides would result in some increased cancer risk to both the occupational workers transporting and handling the material, and two, members of the public driving along the road or living along the transportation routes, continuing the quote, the probability of a severe transportation accident that releases sufficient qualities of uranium hexafluoride that could pose health breath risks is low, but the consequences of such an accident, should it occur, are high -- I suppose that's -- yeah -- based on this analysis, the impacts associated with such an accident as part of the proposed action are considered moderate.

No mention is made of accidents with enriched, radioactive material leaving the plant to become fuel for nuclear plants and other critical safety concerns. I believe that these and many other safety issues not adequately addressed in your DEIS mandate that NRC deny issuing the license to USEC. I believe that these and -- because of the time constraints again, this evening, I will continue my remarks in writing and submit them before your October 24 deadline and I'll give you printed copy of my comments tonight.

FACILITATOR CAMERON: Okay, thank you very much, Jean, and obviously you did a careful reading of the

document. Thank you for that, too. All right, thank you, and we'll attach these to the transcript. We can do that, right, Kris?

COURT REPORTER: Yes.

FACILITATOR CAMERON: All right, thank you. Mr. Beekman? Blaine Beekman?

MR. BEEKMAN: I, too, have spent quite a time in that document, and I guess that my view differs a little bit because sometimes it does take 450 pages to tell his story if it's complete. I don't have a lot to complain about it. In fact, I thought it was pretty well-done piece at this point, but I'm still waiting to see the final document.

Last year, we brought up 8,000 letters of support, because it was important to understand that the community where this plant, if it is licensed and built, resides. It was impressive. It was certainly, I think, representative of the basic feeling of most of the residents, but that's basically all that those folks did. We didn't have 8,000 people show up for the meeting and -- but still, I think it was clear and the picture got across, both to USEC, and people who needed to see it there was a lot of support for it.

This summer, we've had something entirely different. We've had a group of things put forward that

appeared to be very difficult to understand, almost unfathomable. Now basically, most of the folks that live in this community are not nuclear scientists, we're not architects, we're not archaeologists. A lot of things we aren't, and so when people say, or you see lists of things which are absolutely -- something that we've never experienced, it was really somewhat confusing except, the strange thing that developed, because when we began to ask around in this community about certain issues we found out people had attitudes about them, then found out that those attitudes went back to experiences and facts that they had had, and when you begin to put the community together and let them speak out about what they knew about things that had happened in this community over the past 50 years, we found out that they had really a lot of information to give. It's just that no one had asked them and what it really -- and there are people in the community, I know --or, in this room tonight, I see -- looking back and see Bob Childers, I see Teddy West, I see Steve Eckhard, guys who are able to bring information into events and situations that were trying to be explained that nobody else seemed to have an explanation for.

What I really think that that shows, on top of the fact that they had stuff to give, was the amount of effort that went into it by certainly -- in one

incidence, a couple of dozen individuals who -- some still live in the community, some have moved away, but we wanted to be able to locate them and people went out of their way to give us addresses, phone numbers and whatever so that we could try to answer these questions which, when you put everyone who have information about them, they weren't really all that tough to understand, and they certainly weren't quite as exciting as the theories put forward behind them, but I think the important thing here is that these people in the community, some of whom signed the 8,000 letters last year, they were willing to put out the time and effort to try to show what some of the facts were because again, it's a different level of support in this community, and it's what we've learned to live with, with the gaseous diffusion plan for 50 years. Now, we look at a technology that by any standard that we can see, appears to be safer and whatever, but again, we brought 8,000 letters last year. This time it was a smaller number of people, but a much more intense effort, but the result of each of them is the same. It's a support for this project and an attempt to make sure that the NRC regulators who are studying it get as correct the information as possible. Thank you.

FACILITATOR CAMERON: Okay, thank you, Mr. Beekman. Then I'm assuming that some of that information,

or all of it is -- has been presented to the NRC or will be presented?

MR. BEEKMAN: Yeah.

FACILITATOR CAMERON: Okay, thank you. Next we have, I guess I would call it a collegial effort. We have four women from the same organization, which is PRESS, which they will tell us what PRESS stands for, but we're going to hear four speakers, and we're going to start with Pat Marida, and then we'll go to Kathy Arnold, then Nancy Walker, and then Vina Colley, right, Pat? And, you're going to lead off for us? Okay.

MS. MARIDA: Hi, my name is Pat Marida. I do have some -- a written copy of my statement for the NRC. I am, tonight, reading comments from a PRESS -- the Portsmouth/Piketon Residents for Environmental Safety and Security.

According to this Draft Environmental Impact Statement, the ACP would cost about $3 billion to construct with centrifuges. The Enterprise Zone program of the State of Ohio would expect about 15,000 new jobs to be created for that scale of capital investment. In other words, put an average non-nuclear industry on this site and you would get 15,000 jobs. On page 3-50 of the DEIS, we find that USEC currently employs 1,223 workers at the site. On page 4-34 of the DEIS, we learn that in the

operation phase, the ACP is expected to create 600 direct, full-time jobs. This is clarified on page 494 of USEC's ACP application, where it states that the operation of the ACP is projected to employ 600 personnel. In other words, the ACP would result in a net loss of 623 jobs. We estimate that the indirect jobs lost based on 900 indirect ACP jobs created would be about 935, for a total net loss of 1,358 jobs caused by the ACP. That's not counting the 750 jobs that would be lost at Paducah.

However, if we assume that those 6,000 -- excuse me, 600 created jobs result from the $3 billion investment, the ACP underperforms in job creation by a factor of 25 by Enterprise Zone standards. So, if $25 -- 25 times less money, less jobs for the money. Differently put, the Enterprise Zone would create the same number of new jobs for an investment of just $120 million in capitol.

In the building phase, the assessment of impacts to tax revenue is treated differently from the impacts to population characteristics. For tax impacts, the DEIS states that building will create 3,362 jobs, but for population impacts, the DEIS states that 2,998 of those jobs are on a continuum of existing jobs generated or supported by current USEC activities, thus, the DEIS tells us, 374 new jobs would be created during

construction.

To summarize the job situation, the DEIS contains enough information for us to predict that the ACP would create 374 new jobs over the short-term building period, followed by a net loss of 1,358 jobs in the operations period.

On safety, if we add up all the deaths and injuries presented in the DEIS due to routine transportation and due to transport accidents and non-occupational accidents, we get a total of six -- of just six deaths and 1,117 injuries; however, the DEIS neglects to express the injury rates in several significant categories related to routine and accidental radiological exposures in both the occupational and transport categories of both the operations stage and in the decommissioning stage.

Further, the DEIS treatment of occupational injury rates depends on statistics from the Bureau of Labor Statistics, the BLS, but overlooks an important statement in the BLS study which says some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, are often difficult to regulate -- excuse me, difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be

understated in the surveys illness measures. That is end of quote from the Bureau of Labor Statistics.

On page 462, the DEIS describes that workers may be exposed to puff releases of uranium hexafluoride gas which is exactly the type of puff -- of exposure that would result in a long-term latent illness.

To be fair, the DEIS does show in table 3-29 that mortality rates in Pike County, due to renal failure, are between two and four times that of the rates in Ross County and Scioto County; however, although renal failure is associated with uranium poisoning, the DEIS suggests that this death rate may instead be associated with diabetes and hypertension. The NRC staff has made no attempt to determine whether uranium poisoning has, in fact, caused those deaths.

Blindly following USEC's analysis, the DEIS compares potential ACP occupational injury rates to those from the broad and now obsolete Standard Industrial Classification, which is called Industrial and organic chemicals, not elsewhere classified.

Not only is this inappropriate, but the ACP occupational injury rates are projected using Piketon operations in 2002 and 2003. Uranium enrichment operations at the DOE reservation in Piketon, Ohio, ceased in May, 2001. In fact, as measured by the NRC's

enforcement action notices, USEC has, by far, the worst safety record of all NRC materials licensees. Of 516 materials licensees that have been issued with NRC enforcement notices, USEC has the most, with 16, followed by Mallinckrodt Incorporated, with nine, and Westinghouse Electric, with six. Most violations have just one or two -- most violators have just one or two notices.

On security, this type of plant has a poor history. The Uranco Centrifuge Plant is responsible for allowing the Con Network access to the centrifuge technology behind the enrichment programs of Pakistan, Iran, Iraq, and Libya. So, that is how they got access. Some of USEC's violation notices have involved lax control over classified computers.

So, that's the end of my statement. I would like to point out that over on the table, I have put out some information from the Nuclear Information and Resource Services. It's called "The Myth of the Millirem," and in ten sentence -- a ten-word description of what that says, it says that the rem is not based on any standard unit that can be verified. So, thank you very much.

FACILITATOR CAMERON: You're welcome, and the table you are referring to is --

MS. MARIDA: Is -- it's right over here.

FACILITATOR CAMERON: Right over there somewhere.

MS. MARIDA: Right over -- right.

FACILITATOR CAMERON: Okay.

MS. MARIDA: The round table on my left.

FACILITATOR CAMERON: The round table, okay.

MS. MARIDA: The Myth of the Millirem, and so I think there are -- we -- our statement is long so we've got enough people to finish it.

FACILITATOR CAMERON: Okay, thank you, Pat. And, Kathy Arnold?

PARTICIPANT: (Inaudible comment from an unmarked location)

FACILITATOR CAMERON: Yeah, I think this is all one statement that we'll attach.

MS. ARNOLD: Although we have yet to complete our analysis of the 470-page Draft Environmental Impact Statement itself, we have already identified contradictions, bad advice, poor treatment of alternatives, incompetent data entry, and incompetent modeling --

FACILITATOR CAMERON: You're going to have to --

MS. ARNOLD: Come closer?

FACILITATOR CAMERON: Yeah, because I think they're -- that's --

MS. ARNOLD: Okay. Where am I? We've already identified contradictions, bad advice, poor treatment of alternatives, incompetent data entry, and incompetent modeling based on unverifiable methods. Moreover, the DEIS has overlooked some obvious problems, and it overlooks the possibility that USEC may have misled the State about the costs of the ACP, or that the ACP may be too expensive for investors to back it.

Further, DEIS contains little in the way of independent investigation and it does little to open the details of the project to public scrutiny from under two layers of secrecy: classified information and proprietary information.

In addition to this, we feel that the NRC staff has neglected it's obligations under 40 CFR 15.03 to respond, in satisfactory manner, to the scoping comments submitted by opponents of the ACP for the Draft Environmental Impact Statement. Most of these flaws seem to result from the NRC's staff repeating rather uncritically the assertions in the analysis of the USEC ACP application documents.

We should remember that the ACP application is such a highly -- such a high-qualified

application that although it models the highest possible flood using the low rate five times that of the historical flood of 1937, it finds that the highest possible flood actually reached a lower height than the 1937 flood.

The DEIS contradicts itself. For example, the annual number of feed cylinders is different on page 2-22 than it is on page 4-47. The DEIS also offers bad advice. For example, on page 2-18, it recommended that the GCEP documents from the 1980s be destroyed. This would make it more difficult to determine what contaminants have historically polluted the groundwater at the site, thereby, impeding cleanup.

The DEIS treats alternatives very poorly. For example, there is very little discussion of the potential benefits of simply cleaning the site up once and for all and using Enterprise Zone incentives to reindustrialize the site.

Another alternative for the industry would be a scheme in which laser isotope separation units were located at all the major power stations. Laser isotope separation costs less in capitol startup and electricity for operations, and is capable of processing smaller amounts of fuel. Moreover, by processing fuel at the reactor site, the risk to the public due to transportation of low-enriched uranium would be effectively eliminated.

In cost and benefit, it's a superior scheme.

The DEIS makes trivial false statements. For example, on page nine -- page 369, the DEIS states that the calendar year 2003 Bureau of Labor Statistics average incidence rate of nonfatal occupational industries -- injuries and illnesses are not currently published. In fact, they were published in December, 19 -- 2004, and reissued in June, 2005. So, this statement is false. Clearly, there is -- clearly, this error arose because the US -- because USEC application texts were cut and pasted into DEIS.

The DEIS purports to assess unknowable risk. For example, a footnote on page 4-53 states that no 2.5 ton cylinder is currently certified to ship uranium enrichment to higher than 5 weight percent of uranium-235. Yes, the DEIS goes on to assess the risks associated with the transport of 10 percent enriched uranium in a cylinder that doesn't exist.

Incidentally, the USEC has yet to explain why it requires the license of 10 percent enrichment. It's competitor in New Mexico has only asked for a five percent license and the power industry doesn't require fuel enriched above five percent.

FACILITATOR CAMERON: Oops, thank you, Kathy. And, Nancy Walker?

MS. WALKER: To continue from the PRESS, the Piketon/Portsmouth Residents for Environmental Safety and Security statement, the DEIS has incompetent data entry with another point that was raised. For example, table 4-15, estimated latent cancer fatalities from the transportation of radioactive materials for one year of operation is seriously messed up. None of the totals is the sum of it's column or row. Moreover, by comparison to table D-12 we can see that the risk to the public, whether following a cylinder on the road, living by a road where cylinders are transported, or pulling into a rest stop where a cylinder truck is, the risks have obviously been grossly understated by a factor of 10,000.

The DEIS shows incompetent modeling. For example, in tables D-12 and D-14, the trip from Piketon to Clive, Utah, indicates that the trip includes rest stops and inspection stops. The modeling is based on the WebTRAGIS system, but the WebTRAGIS manual only mentions rest stops and inspection stops in association with road transport, not the rail transport, as indicated. So, the Piketon-Clive trip is clearly modeled for road transport, yet on page D-5, it is clearly stated that this is a trip -- is a rail trip.

Furthermore, we tried to register with the ORNL WebTRAGIS system on September 23, but we have

received no reply. We suppose that the system admits only classified access and that the system is, in any case, not available for public scrutiny. The risk analysis is therefore unfavor -- unverifiable by the public.

The DEIS overlooks obvious problems. For examples, on page 4-76, the DEIS informs us that the DOE conversion utility is designated to operate until 2024 and to handle a capacity of 243,000 metric tons of depleted uranium hexafluoride, but that the ACP is designed to operate until 2040 and to generate 571,000 metric tons, thus the DOE conversion facility is designed to be decommissioned 16 years too early and to have a capacity that is less than 1/3 of the ACP waste.

The DEIS overlooks a possibility that the USC may -- that USEC may have misled the State of Ohio in order to win various incentives. For example, on page 7-1 of USEC's ACP Environmental Report, we find that on August 15, quote, 203, USEC issued requests for proposals to the Commonwealth of Kentucky and State of Ohio to cite the ACP at the respective gaseous diffusion plant. Both States were offered an opportunity to provide financial or other incentives to reduce the cost of the ACP. By all accounts, the cost of the ACP as understood by the State of Ohio was 1.5 billion; however, page 7-2 of the DEIS gives the cost of building the ACP and manufacturing

centrifuges at 2.872 billion.

The DEIS doesn't consider that the cost of the ACP is unlikely to be met by private investors. For example, in addition to the costs mentioned above, this position would cost 2.758 billion based on 571,000 metric tons of tails, 7 MSW plant, and -- at $4.83 per kilogram disposition cost, this compares with a license application's estimate of $0.72 billion for tails disposition, license application, page 10-16.

Further, decommissioning would cost $0.435 billion, according to DEIS page 7-2. Know also that USEC has estimated the decommissioning and decontamination at $0.130 billion, license application 10-14.

So, USEC appears to have uniformly underestimated costs by a factor of between three and four, so the total cost, without the withheld information about running cost, is about $6.65 billion. By comparison, when USEC went public, it raised just $1.5 billion in it's initial public offering. This was $1.0 billion short of the $2.5 billion required for it's AVLIS program. The AVLIS program was cancelled.

FACILITATOR CAMERON: Are we ready for Vina? All right, thank you very much, Nancy. This is Vina Colley.

MS. COLLEY: Hi, I'm Vina Colley. I'm

President of PRESS, Portsmouth/Piketon Residents for Environmental Safety and Security. I am co-chair of the National Nuclear Workers for Justice.

In the DEIS, presents little evidence that it contains the results of an independent investigation. For example, PRESS has released the results of analysis of radioactivity in Big Run Creek, which casts significant doubt that DOE, USEC, and other EPA data from offsite sample locations, may be flawed.

The DEIS used data from these sources, a comprehensive independent survey is warranted. PRESS has had two different independent experts who came in here. The first expert that came in, he read DOE documents. He didn't have to do any testing, he didn't have to do anything, he just read DOE documents which proved that there is offsite contamination in the creeks going to Little Beaver, Big Run, Big Beaver, into the Scioto river, into the Ohio river.

We want an independent investigation. We don't want to believe the word of USEC, DOE, or -- who was the other one, I can't -- I forgot my glasses, guys -- the USEC and the contractors of this facility, the NRC needs to do an independent investigation and I'm still not sure who is over the special nuclear material at this site. I'm still not sure who's really regulating the

trans-uranics that's going into the creeks. I don't remember seeing it in your book who's going to regulate it.

The DEIS was overlooked some obvious problems and it overlooks the possibility that USEC maybe misled the State about -- I'm sorry, everyone, I forgot my glasses and I can't hardly see this paper -- about the cost of the ACP or that the ACP may be expensive for investors to back it. Further, the DEIS contains little in the way of independent investigation and it does little to open the details of the project to the public scrutiny from under two layers of secrecy, classified information, and prosperity information.

The difficulty seems to result mainly from the NRC following the assertion and the analysis of the USEC ACP application to closely and uncritically -- I heard a few statements here tonight and I'm -- as a former worker, a whistleblower who's been blacklisted, who's lost all her benefits and everything from this facility, I sit here and I listen to you tell these people that this is a safe plant and it is going to continue to be safe. The whole time I worked here, there was 570-some violations year after year after year that never was taken care of. The centrifuge plant, when it started in '85, I remember that there was alpha daughters in the lunchroom where the

workers were at and to this day, I bet none of these workers have ever been told.

This facility produced highly enriched uranium for weapons-grade material from 1954 to 1992, which you thought was '64.

I'm still wanting to know who's going to take the liability for all these sick and dying workers that aren't being taken care of now, and now, you want to add additional stress to the community and to the workers? We are becoming a national nuclear sacrifice zone. We are going to be taking everyone's nuclear waste if you guys let this happen. If you start this it means that they'll never know what, exactly, is going on here, in Piketon, and I'm really concerned about the radium-226 that's offsite. Not only did my experts back it up but your experts that you're listening to right now, backed it up with a letter to me. So, someone's conning us in all of the analysis that they're taking at this plant.

FACILITATOR CAMERON: Okay, thank you, Vina, and thank all the participants for -- from PRESS, and if you do have a statement that we can attach to the record, we'll do that, and just one clarification is that the Draft Environmental Impact Statement is a draft, not final yet, including the conclusion, until we evaluate comments, and then there is the other part, the safety

review, in which there's been no finding yet. So, it's still in -- is a work in progress, here.

We're going to go to Mr. Geoffrey Sea, and then we're going to go to Dr. David Manuta. Geoffrey?

MR. SEA: My name is Geoffrey Sea. I'm the owner of the Barnes home, which is one of the three historic properties that the DEIS mentions but doesn't really say much about, and I'll start by saying that it's a little irritating, the way they describe the Barnes home as qualifying under criteria A and C. They don't say what -- where those criteria came from, or they don't say what they are. I find that to be a rather inscrutable and mystifying way to describe a historic property and get into a discussion of the impacts on it. So, let me tell you a little bit about the Barnes home.

Barnes home was originally built in 1804. It is generally considered to be the finest home of the 19th century in Pike County. The Barnes family was extremely influential over four generations in the politics -- political developments and general history of the county. I won't go into that, a lot of that will be made available in my written comments.

The house is on the border of the ACP site in the direction of the maximal windborne contamination from the site, which has a one-mile fence line with the

site. The DEIS could -- just dismisses and concludes, offhandedly, without any analysis, that there are not aesthetic or visual impacts on my property in particular. I can't -- I know you can't all see this, this is a picture of the ACP buildings from my fence line, okay? You're all welcome to come up and take a look at this photo afterwards. It will be made available and attached at the website at which these comments are available, so you'll all be able to see it there.

Now, no one from NRC came to my property and looked at what the view of ACP is from my property, yet they conclude that there's no visual or aesthetic impact, or that it's minimal. The new buildings that NRC wants to approve -- the staff wants to approve as being built will be between these existing buildings and this fence line here, okay?

Now, what are criteria A and C? Criteria A is architectural significance, and we've had architectural historians come and analyze my house and conclude that architecturally, it's one of the finest examples of architecture from that period in the country. Those statements will be made available to NRC. They would have been made available already, but I was not made a consulting party to the review of cultural resources, even though I, starting in December, 2004, told NRC

directly about my interests and was, in fact, admitted as an intervener -- as having standing to intervene in the issuing of a license, but they still didn't consult me as a consulting party in the historical review. That has now been corrected to very loud complaints from yours truly. But, because of that, they were -- did not have access. They didn't -- never asked to come to my property. I'd be happy to give them a tour any time they'd like. I'd like to give them a lot of information, but that has all been held up. That all needs to be corrected.

Now, there were only three properties listed as having -- as being historic properties in the DEIS. That's rather strange and mysterious. The -- I have, in documents that I've submitted, legally, to the Atomic Safety and Licensing Board that's hearing this matter, have provided NRC with detailed information about all the historic properties in the affected area, and there is no mention of many of them, and let me mention four others that receive no mention in the DEIS:

One is the Sargent home, which is just up the road from the Barnes home, and is at the main plant gate. I'm not sure -- I know the owners of that home were here earlier. I'm not sure if they're still here, but anyway, the Sargent family was the family that gave rise to the name of the town of Sargents, which is where the

plant is located. They were very closely related to the Barnes family. They intermarried. Three of the Barnes boys married three of the Sargent girls, so they effectively became one big family and the Barnes and Sargent estates, which included some 4,500 acres, originally, provided, essentially, all the land, or 90 percent of the land on which the atomic reservation is located, the AEC came and took a few thousand acres from the Sargent estate and very close to that from the Barnes estate. The actual place where the ACP buildings, where the main process buildings will be located, is on the border between the Barnes -- old Barnes and old Sargent estates.

The third -- second house is -- third house is the Rittenour home, which is down by the Scioto river, and the Rittenour family was also related to the Sargent and Barnes families, was one of the founding families of the town of Sargents.

The important thing about -- one important thing about the Rittenour home is that it -- on the Rittenour estate were numerous Indian earthworks that were written about in 1820 by a guy named Caleb Atwater. Some of the earthworks that made the Ohio earthworks famous were on that property. Now, one of those earthworks is a long, linear earthwork that was, in fact, seized by DOE in

1983 by eminent domain and is one of the places where DOE and then USEC has placed their water field from which they will draw the water to supply ACP.

And that is, in fact, the reason why NRC went into these detailed analysis and explanation of ACP's use of water resources, but they didn't tell you the reason. The reason is that there are earthworks that have now been located on the water field site, called the GSEP water field down along the Scioto river. Why is that missing from your DEIS? You had detailed information about it. On August 5, we -- I brought three cultural resource experts, one archeologist, one expert in ancient architecture, and one expert in Hopewell culture on to that site after a lot of argument and a lot of fighting, finally got access due to the good graces of the ASLB, which intervened to basically compel USEC to allow us to go on to the site, and we now have an expert statement from those three experts certifying that there is an earthwork there, right underneath the wells from which they will draw water.

And, the problem with the analysis you heard earlier is that NRC, so far, follows only the USEC model of talking only about the overall water usage of the plant in an attempt to minimize it, saying that, "well, it will only be a 10 percent increase in the water usage of

the site," but that's irrelevant. What we want to know is not what is the overall water usage, because there are many well fields and the plant draws water from many locations. What we want to know is what's the impact of water usage at the earthworks site where the earthworks are located, because that's the impact, and that's on DOE land, on Federal land, which is supposed to be protected, and the national historic preservation act mandates that studies be done when such a cultural resource is found on Federal land.

So, part of the 106 review that the DEIS completely neglects and overlooks is that you are required to mandate studies be done of what the hydrological impacts are on those cultural resources that have been identified on that federal land that, again, was seized from the Rittenour estate.

Now, the owner of the Rittenour home supplied me a letter, which I provided to NRC, which was actually addressed to NRC. There's no mention of that letter in the DEIS, in which he complains about the whole process by which DOE seized his -- the land for this water field in 1983, complains that DOE never complied with the National Historic Preservation Act when they seized the land, never made him a consulting party, and he asked to be made a consulting party now for the licensing process

of ACP. As far as I know, there's been no reply to him. There's no mention of him or his letter in the DEIS.

You sent out all these consulting letters, supposedly, to fulfill your requirements under section 106 of the act, but you never consulted the people who asked to be consulted, which included me and Charles Beagle, the owner of the Rittenour home. It's rather unbelievable.

Now, your interpretation of section 106 is rather incredible. It's basically that you consult with the State Historic Preservation office to ask them who you should consult. That's not the law, I'm sorry. The law is, and this comes from my direct discussions with the State office, is that the agency is responsible for identifying the consulting parties, meaning that if a consulting party comes to you and says, "We have concerns," you must evaluate those concerns directly because we don't always go first to the State Historic Preservation office. They don't -- that's not their role. They rely on the agency to provide them information about the project, and they know almost nothing about this project, because they've been told nothing about this project.

And, that applies, as well, to the Native American groups that you mentioned, and you'll be hearing more from them in my written comments. There will be a

lot, and you'll be getting direct comments from Native American groups as well. Don't have time to go into that tonight.

FACILITATOR CAMERON: And, Geoffrey, could you wrap up? And, I know you have some schematics of things that you want us to attach, but if you could just --

MR. SEA: Yeah, and let me just explain those, and you're all welcome to --

FACILITATOR CAMERON: Okay, thank you.

MR. SEA: -- look at them after. There is a map, which I've submitted to NRC. I'd like to see it included in the final environmental impact study. It's a map that I've created that shows all of the historic sites in relation to the ACP, to give you an idea, because you really do need a map to see what the impacts are, and what really has to be in the final impact study, there's a reference to it, but unless you see it visually, you don't really get a sense.

This is what's called the Barnes Works on the former Barnes estate. It is a major Hopewell site, one of the largest Hopewell earthwork complexes in the State of Ohio, or in existence, period. This is the drawing from Squier and Davis' 1848 Monuments of the Ancient -- Ancient Monuments of the Mississippi Valley.

It's a very impressive drawing and gives you some idea of just what we're talking about, not just mentioning that there's something called the Barnes Works or the Scioto Township Works, which these are also called.

And, I just want to mention one other thing really quickly, and that is that this community has been deceived on one particular issue, and that is the issue of the deconversion plant on site. NRC and it's DEIS has in fact gone way beyond being a regulatory body and has actually solved USEC's waste problem for it. That is, USEC didn't really say in their environmental report what they intended to do with their depleted uranium waste, and I'm sure that that prevent -- presented a real dilemma for NRC because USEC didn't solve this major problem, and so NRC stepped in, basically, and in their DEIS, says that the waste will be treated, or will probably be treated, or can be treated at the deconversion facility that's now being built on site by DOE.

Now, this is hugely problematic, because DOE, in their reports to this community at their semiannual environmental assessment meetings has said repeatedly that that plant can not be used to treat a USEC waste, there is, in fact, a legal -- both legally and technically -- legally, to use that facility would completely violate the letter and spirit of the USEC

Privatization Act. The purpose of the Privatization Act was to separate private facilities from legacy government facilities. That facility was built to treat the legacy waste that is of public responsibility and at public expense, and is not available, legally, to treat USEC's private waste. Without a new act of congress, and if you want to call for an act of congress to change that requirement of the law, you should be direct about it, but this community was deceived, and technically, that facility was -- is not capable and was not designed to treat all of the USEC waste.

FACILITATOR CAMERON: Okay, thank you --

MR. SEA: Thank you.

FACILITATOR CAMERON: -- Geoffrey, very much, and if you have those -- you don't have to give them to me now, but we'll make sure we get them on the transcript, those schematics, okay?

MR. SEA: Okay, give me a chance to show people --

FACILITATOR CAMERON: Okay, yeah. Sort it out. Dr. Manuta? Why don't you start and we'll see if we can get that --

DR. MANUTA: Hi everyone, can you hear me? I was pleasantly surprised, earlier this month, to get a surprise UPS delivery containing the EIS, and anyway, in

my background as a professional consulting chemist and engineer, I came across two technical errors that do need to be marked off in the EIS itself.

Okay, the first one is page 6-3. And again, I guess, this is the reason why you have your draft is to make sure that things like this don't go out into the final edition. On page 6-3, beginning, it's -- 6.1.1 Air Emissions Monitoring, in the second paragraph that begins on line 14, Airborne release. In line 18, you then have a shopping list of the chemicals. The chemical formula for uranyl fluoride is not right. Okay, it's listed as UF2 in the document. It should be UO2F2, okay? That needs to be taken care of because that's an error that ought to be corrected.

And then, see, on page -- on Appendix B on page 1, is there anybody here from the Chillicothe paper because this is something that I tease them about all the time. We've got a spelling mistake in the letter to Mr. Epstein. Uranium Hexafluoride, of course the U goes before the O, not the other way around, okay, and that's why I constantly catch them on that.

So, now, with the editorial stuff out of the way, I wanted to make a couple of quick hitters here so we can go home. Thank you. Because, on the nuclear fuel cycle, the only thing that this hearing really should

be about is step four, because we're, again, working with USEC's information submitted to NRC to develop an environmental impact for the gaseous centrifuge enrichment plant. Now, the NRC has regulatory authority in many of these other areas, but our concern is on number four, and I think that's important up front, now, because the way the enrichment process works, as you've heard bits and pieces, the natural feed is at a level of about .72 percent uranium-235 with the balance being 99.3, or thereabouts, percent uranium-238. So, the UF6 is really a blend of two similar compounds, and what the enrichment process is designed to do is to enrich in a cascade-type process, in other words, one machine after the next, to enrich the uranium-235 F6 to a level that the public utility can use, okay? Bottom line, that's what this is all about.

Okay, now when we make the comparison, the depleted uranium that we talk about is primarily not only the U-238 F6, it's now at a level -- not at 99.3 percent, but probably around 99.6 or 99.7 percent. In other words, a significant amount of the usable uranium for electricity generation has already been removed and so now, just to make the linkage to the conversion process, because the UF6 is not a stable compound with regard to it's chemistry. I've dealt with dropped cylinders at the plant

of UF6 where the chemical does come out. It can react with the cylinders, it can react with the moisture in the air, and so on. The important thing is, in general, when a UF6 cylinder is -- may be dropped, or where there's a crack in the cylinder, many of the compounds that are formed, with the exception of HF, are not volatile. In other words, they stay right there. So, the issue of drifting off of the reservation some distance away, HF is the only one that you have to be concerned about. The uranyl fluoride is a nonvolatile solid. It's going to drop out wherever it's formed. Notice, that's why you get a mist. And then, at some point, that does come out, literally, like snow. Okay, so we need to be clear about what the science is.

And, so, as far as I'm concerned, with the two minor issues I brought up, this is a superb document for meeting the objectives of number four, and that's really what I think we're here for tonight, because the tails, or the U238 F6, is not reactive waste. That's not the stuff that's going out, in some point in the future, to Yucca Mountain. We're talking about converting that uranium fluoride compound to a uranium oxide compound, whether it be UO2, UO3, U3O8, fundamentally, what we want to do is put it back in the ground, because that's, ultimately, where it came from. There can't be any more

environmentally responsible way of handling it than that. We talk about cradle-to-grave, make the full circle? Yucca Mountain's not part of this discussion, and we need to be very, very clear about that.

Also, a couple of quick hitters before we go, next year, in the -- when they do the census, we will hit 300 million people as a nation, so we will have added in, since 2000, probably around 18 million people, okay? The reason -- I do a lot of driving, and people talk about the price of gas. Well, the fact is, what we're dealing with tonight doesn't approach that. We're really more concerned, not with the transportation issues tonight, but with the power generation issues, because there's a difficulty associated, whether you deal with hurricanes, natural gas, whatever, I like when I come into the office in the morning and I hit the light switch, and the lights come on. And, wouldn't it be nice, based on some of the environmental issues you read all about, that when uranium is used, and again, downstream, again, in the power generation part, that you don't have any of the greenhouse issues, and by, perhaps, ramping up the amount of uranium we use for power generation, we can free up some of the carbon-bearing chemicals, the petroleum and such, for transportation, keep those costs down, and I think that's pretty important to understand.

And, I think that's probably a good point to leave it, just to kind-of fill in what I consider some of the pieces, here, about why we're here and about why it's important. So, thanks for listening.

FACILITATOR CAMERON: Okay, thank you, Dr. Manuta. Thank you. Next, we have two more speakers, Professor Andrew Feight. Professor Feight, do you want to talk to us?

DR. FEIGHT: My name is Dr. Andrew Feight, and, let's see. I moved here, to Portsmouth, back in 2001. I took a job as an Assistant Professor of History, teaching American History, at Shawnee State University, and about the time that I arrived here, I read the news that the enrichment plant was shutting down, and for many people in the community, that was bad news, the loss of jobs. But, for me, I look to the future and I was quite relieved and happy about that because I was looking forward to a nuclear-free future for southern Ohio, for Scioto County, Pike County, for where I have chosen to live and where I have chosen to put my roots down and raise a family. So, I was looking forward to a nuclear-free future for myself, for my family, and my children.

And, I'm a little disturbed by this environmental impact study, and I'm going to approach it,

really, from the perspective of a historian. I've read the parts dealing with historic and cultural resource impacts, and what I see missing here is really a consideration of an alternative future, alternative uses for the site, a vision of a nuclear-free, cleaned up, decommissioned nuclear site that really dates from the cold war, that is in our past.

And, the more I studied local history and the more I learned about the place, I've come to understand that the site of the gaseous diffusion plant, the atomic reservation, truly is a national, and even international, historic site.

Geoffrey Sea spoke of the Indian mounds located on the property, but there's also a story that Mr. Sea is pursuing that is only now being told, although I'm sure people in the community have known this for a long time, and that is that the last passenger pigeon known to exist in nature was shot and killed on this site.

The extinction of the passenger pigeon is an incredible historical tail and right here, in Pike County, at the site of the Barnes house, and on that property, is where that last bird was shot, and that makes this location quite important in the history of the environment of the United States, the history of Pike County, the history of southern Ohio, the history of Ohio,

the history, really, of our nation. A very important event did happen there.

And so, a vision of a future without a centrifuge enrichment plant would entail appreciating this site and developing this site as a historical -- a very important historical site, one where the history of the cold war, the history of the environment and the extinction of species could be meditated upon and studied. So, not only do you have Native American sites there, you have the history of the Barnes home, you have the history of the last passenger pigeon, and the backdrop and the background, which you can see from the property, the A plant, which, if it was cleaned up and decommissioned and new industries, non-nuclear industries brought in, would be a much better future for my children, for our grandchildren --

The Draft Environmental Impact Statement says -- study says that there are no large impacts, and there's certainly -- according to this report, is that there are no large impacts on historic and cultural resources. That is not true. This is a large impact, people just don't appreciate the history. People don't know the history, they don't know about this, and so they don't see it for what it is, which is a huge, large impact. It will continue to desecrate Native American

sacred spaces. It will thwart the development of the site as a historic site for appreciation of the story and the history of the passenger pigeon, and of the environment in general, and the problem of species extinction. And, it will continue the environmental degradation of the area, and all of this runs up against this vision that I had when I first came here in 2001 of a nuclear-free future, of a southern Ohio that is cleaned up, where we put the cold war behind us, and this site can be a cold war historic site, but it cannot be that if we continue to operate and enrich uranium there, and there are sites around the United States that are becoming historic sites from the cold war, and this would be an excellent cold war site.

Two more points. One, about the centrifuge technology. This technology is the very same technology is very concerned about Iran possessing. In fact, there is very high tension between the U.S. government and Iran right now because the U.S. government is concerned that they are building a centrifuge enrichment plant. The Iranian government says they are doing this just for domestic purposes, and that may be, but there is concern, and our government has right concern for this, is that that technology can be used to make bomb-grade material, and that is why they're concerned,

yet, should not we be concerned about this, that while the license is not for the enrichment of bomb-grade material, but the technology that they're putting in can be used for such purposes, and I don't want such a possible future for southern Ohio. I don't want something to change down the road and they change the facility to start making bomb-grade materials, because then, the environmental impact would be extremely different, and that is a possibility. It would change the whole impact of the plant if they did, ultimately, start enriching it for bomb-grade material.

So, let me just close and say, let's make sure that the nuclear industry is in our past, because I really hope for a nuclear-free future for myself and for my children. I heard that this plant could close down in 2040. In 2040, I will be 70 years, and my son will be 35, my age right now. That's a long time, that's a very long time, and I would rather us not go down that path, and I will borrow something you said, which was, let's containerize it and ship it offsite. Let's containerize this whole thing and ship it offsite so that we can get on with a nuclear-free, clean south Ohio. Thank you.

FACILITATOR CAMERON: Thank you, Dr. Feight. And next, we have Alan Weiner. Alan?

MR. WEINER: Thank you, everyone, for

coming and thank you, for taking our comments, but I saw one -- what I think looks like a typo, where it mentions in the -- I'm not sure where, it's near the beginning, but I'll research and write it, too, that it seems that the number of cancer deaths will probably be, according to the document, higher for routine non-accident issues, like .013 deaths per year, than accidental release, which they don't say the amount, but that seems to be .008, or half of the number of cancer deaths.

I also am active in Cincinnati area with recreational trails and river resources. The Mill Creek is one of the greatest streams there, but we're working to make that a destination by cleaning it up and putting greenways along it, and I wonder, with this plant here, would there be very many recreational opportunities, both along the Ohio river, which, the Ohio river way is hopefully going to be a recreation destination. Hopefully, the Scioto river could be hooked up to that, so I think there's a lot of potential here, as well, all along the Ohio, and I'd hope that it could all be kept or made clean. Thanks.

FACILITATOR CAMERON: Thank you very much, Alan. I'm going ask Jim Clifford to -- we still -- we have some time for some informal discussion between NRC staff and our experts too, who are here helping us, and

all of you, I'm going to ask Jim Clifford to just close us out of the meeting.

I just would like to thank all of you for being here and for your comments, and it was obvious that a lot of people took the time to read the document, and we had a lot of relevant comments, and thank you for following the ground rules, too. And, Jim, would you like to do the honors?

MR. CLIFFORD: Thank you, Chip. Once again, I'd like to thank everyone for coming. Clearly, there were emotions that were high on both sides of the issue from what I observed here, tonight, and what I try to do is reflect on what I've seen and heard. There's been an awful lot of information provided, and we'll take a look at those comments, but as far as the atmosphere here, being as emotional as it is and can be, I greatly appreciate the amount of respect that everyone has shown to everyone who provided comments and everybody who had questions, you showed the ability to respect everyone as an individual and have their own views.

To me, I have been working for this country and defending this country for 35 years now. The beauty of this country is that we have the ability to have our own view and to express those.

The purpose of this meeting is to make

sure that everybody has the opportunity to express their views, and to me, that's the most important part of this meeting tonight, is that people felt free to express their views and we had some very strong views, and we do appreciate those. We'll take a look at every single one of those and we will be addressing those.

So, again, thank you for coming, and you will see the final Environmental Impact Statement issued in April. Is that correct? Okay.

And, we will be here for another 10 or 15 minutes for anyone who wants to chat with us. Thank you.

(Whereupon, at 9:36 p.m., the proceedings in the foregoing matter were adjourned.)

- - - - - - -

CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: American Centrifuge Plant Draft EIS Public Meeting

Docket Number: n/a

Location: Piketon, OH

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

Gary Baldwin
Official Reporter
Neal R. Gross & Co., Inc.